

Claims

- Sub A.17 [c1] A method of optimizing a product order where the product includes at least one customer-selectable component, the method comprising the steps of:
receiving the product order;
determining component information in real-time by querying a manufacturer system and, in response to a component being unavailable at the manufacturer, querying at least one supplier system in real time that can supply the component to the manufacturer; and
offering the customer at least one order option in real time based on a result of the determination.
- [c2] The method of claim 1, wherein the component information includes at least one of: component availability, component cost, component delivery lag time to the manufacturer if the component is only available from a supplier, and product delivery lag time and cost for different manufacturing sites.
- [c3] The method of claim 1, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.
- [c4] The method of claim 1, further comprising determining an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and placing an order for the unavailable component with a system of the appropriate supplier.
- [c5] The method of claim 1, further comprising the step of scheduling at least one of a product delivery schedule and a component delivery schedule with a shipper system.
- [c6] The method of claim 1, further comprising the step of determining an available manufacturing site based on at least one site factor.
- [c7] The method of claim 6, wherein the at least one site factor is selected from the group comprising: cost, component selected, proximity of a required supplier to a manufacturing site, proximity of a manufacturing site to a customer ship-to

location, a manufacturing site capacity, and existing component inventory at a manufacturing site.

[c8] The method of claim 7, further comprising the step of confirming at least one of customer product fulfillment conditions, supplier order and ship information, and shipper scheduling.

[c9] A computer program product comprising a computer useable medium having computer readable program code embodied therein for optimizing a product order where the product includes at least one customer-selectable component, the program product comprising:

program code configured to receive the product order;

program code configured to determine component information in real-time by querying a manufacturer system and, in response to a component being unavailable at the manufacturer, querying at least one supplier system in real time that can supply the component to the manufacturer; and

program code configured to offer the customer at least one order option in real time based on a result of the determination.

[c10] The program product of claim 9, wherein the component information includes at least one of: component availability, component cost, component delivery lag time to the manufacturer if the component is only available from a supplier, and product delivery lag time and cost for different manufacturing sites.

[c11] The program product of claim 9, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.

[c12] The program product of claim 9, further comprising program code configured to determine an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and place an order for the unavailable component with a system of the appropriate supplier.

[c13] The program product of claim 9, further comprising program code configured

to schedule at least one of a product delivery schedule and a component delivery schedule with a shipper system.

[c14] The program product of claim 9, further comprising program code configured to determine at least one available manufacturing site based on at least one site factor.

[c15] The program product of claim 14, wherein the at least one site factor is selected from the group comprising: cost, a component selected, proximity of a required supplier to a manufacturing site, proximity of a manufacturing site to a customer ship-to location, a manufacturing site capacity, and existing component inventory at a manufacturing site.

A₁ [c16] The program product of claim 15, further comprising program code configured to confirm at least one of customer product fulfillment conditions, supplier order and ship information, and shipper scheduling.

[c17] A system for optimizing a product order where the product includes at least one customer-selectable component, the system comprising:
a customer interface module that provides a customer with a menu of component options and allows the customer to make a selection from the menu;
a component information determinator that determines, in real-time, at least one of component cost, component delivery lag time, component availability, and product delivery lag time and cost for different manufacturing sites by querying a manufacturer system and, in response to a component is unavailable at the manufacturer, querying at least one supplier system that can supply the component; and
an options generator that offers the customer at least one option in real time based on a result of the determination.

[c18] The system of claim 17, wherein the at least one option is selected from the group comprising: offering the customer an alternate component, removing a component from the order, selecting a manufacturing site, and ignoring the at least one option.

A1 [c19] The system of claim 17, further comprising a component order generator that determine an appropriate supplier that can fulfill an order for a component that is unavailable at the manufacturer, and places an order for the unavailable component with a system of the appropriate supplier.

[c20] The system of claim 17, further comprising program code configured to schedule at least one of a product delivery schedule and a component delivery schedule with a shipper system.